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COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518			EXAMINER SAFAIPOUR, BOBBAK	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/736,815	Applicant(s) GHOLMIEH ET AL.	
	Examiner Bobbak Safaipoor	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Action is in response to Applicant's response filed on 10/17/2007. **Claims 1-32** are still pending in the present application. **This action is made FINAL.**

#### ***Response to Arguments***

Applicant's arguments have been fully considered but they are not persuasive.

In the present application, Applicant argues that Corazza fails to teach a method of tracking mobile station power headroom at a wireless communication network base station.

Examiner respectfully disagrees. Corazza discloses a method and apparatus for performing transmission data rate allocation in the reverse link of a high speed wireless communications network, forming a macro control loop. Each subscriber station selects a data rate based on the amount of data queued for transmission and adjusts this rate based on the available headroom. This adjusted transmission rate is then adjusted again to account for protection of base stations in the candidate set of the subscriber station. This rate is then adjusted in accordance with signals indicative of the loading conditions of active set base stations of the subscriber station. The base stations react (read as tracking) to the subscriber stations action (read as tracking mobile station power headroom) by measuring their instantaneous traffic load and providing feedback (col. 3, line 65 to col. 4, line 16). The recited claim language is given the broadest reasonable interpretation; therefore, Corazza teaches a method of tracking mobile station power headroom at a wireless communication network base station.

Further, Applicant argues that there is not a single instance in Corazza where the transmission of transmit power headroom from a subscriber station to a base station is taught, or even suggested.

Examiner respectfully disagrees. Corazza discloses that the subscriber station resides information about terminal class (for example maximum transmission power), channel conditions (for example transmit power headroom). (col. 3, lines 19-42) The subscriber has information regarding the amount of information it has queued to transmit, and the amount of available transmit power headroom, all of which are essential factors in selecting a reverse link (read as subscriber station to base station) transmission rate (read as transmission of transmit power headroom). (col. 4, lines 17-29). The recited claim language is given the broadest reasonable interpretation; therefore, Corazza teaches transmission of transmit power headroom from a subscriber station to a base station.

Further, Applicant argues that Gopalakrishnan fails to teach base stations storing headroom values for mobile stations based on received headroom reports.

Examiner respectfully disagrees. Gopalakrishnan discloses based on the measured SIR and a target SIR association with the mobile, the mobile transmits a power control message to the base station indicating to the base station whether to increase or decrease the transmission power (read as headroom value) for its association traffic channel. The base station then receives the power control messages (read as storing headroom values) then transmits the voice signal to the mobile. (col. 5, lines 12-28) Furthermore, Gopalakrishnan discloses the data rate is transmitted to the base station via a data rate message on a reverse link channel. The base station then schedules time-slotted data transmission (read as storing headroom values) based on the data rate message. The data is then transmitted. (figure 2; col. 6, lines 54-67) The recited claim language is given the broadest reasonable interpretation; therefore, Gopalakrishnan teaches base stations storing headroom values for mobile stations based on received headroom reports.

Finally, Applicant argues that Gopalakrishnan "available transmit power" cannot be read as Applicant's claimed mobile station "transmit power headroom."

Examiner respectfully disagrees. In the Remarks section (dated 3/6/2007) in response to the initial Office Action (dated 12/6/2006), the Applicant states on page 2 that "'transmit power headroom' represents a measure of reserve or remaining transmit power." Gopalakrishnan discloses a method of integrating voice and data services using available transmit power information to determine data rates, wherein the available transmit power information indicates an amount of transmit power available (read as remaining) for future data transmissions over one or more data channels (abstract).

As a result, the argued features are written such that they read upon the cited references; therefore, the previous rejection still applies.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Corazza (US 6,563,810 B1)** in view of **Gopalakrishnan et al (US 6,859,446 B1)**.

Consider **claim 1**, Corazza discloses a method of tracking mobile station power headroom at a wireless communication network base station comprising: receiving a power headroom report from a mobile station (abstract; col. 3, lines 30-41; col. 4, lines 12-16; Transmit power headroom is exchanged between the network and the subscribers) and updating the headroom value to track changes in a transmit power of the mobile station based on reverse link power control information associated with the mobile station (abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18; Each subscriber station selects a data rate based on the amount of data queued for transmission and adjusts this rate based on the available power headroom).

Corazza fails to specifically disclose storing a headroom value for the mobile station based on the power headroom report received from the mobile station.

In related art, Gopalakrishnan et al disclose storing a headroom value for the mobile station based on the power headroom (abstract; read as available transmit power) report received from the mobile station. (abstract; figure 2; col. 5, 10-42; col. 6, lines 54-67; The data rate is transmitted to the base station (step 150 of figure 1) wherein the base station schedules time-slotted data transmissions to mobile-telephones (step 160 of figure 2; read as storing a headroom value) capable of receiving data at higher rates before mobile-telephones capable of receiving data at lower data rates. The data is then transmitted (step 170 of figure 2))

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Gopalakrishnan et al into the teachings of Corazza to integrate voice and data services onto a same frequency channel using available transmit power information to determine data rates.

Consider **claim 11**, Corazza discloses a method of tracking mobile station power headroom at a wireless communication network base station comprising: periodically receiving a full report from a mobile station that indicates a transmit power headroom of the mobile station (abstract; col. 3, lines 30-41; col. 4, lines 12-16; Transmit power headroom is exchanged between the network and the subscribers) and tracking changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station (abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8,

line 42 to col. 10, line 18; Each subscriber station selects a data rate based on the amount of data queued for transmission and adjusts this rate based on the available power headroom).

Corazza fails to specifically disclose updating a headroom value maintained at the base station for the mobile station responsive to receiving each full report.

In related art, Gopalakrishnan et al disclose updating a headroom value (abstract; read as available transmit power) maintained at the base station for the mobile station responsive to receiving each full report. (abstract; figure 2; col. 5, 10-42; col. 6, lines 54-67; The data rate is transmitted to the base station (step 150 of figure 1) wherein the base station schedules time-slotted data transmissions to mobile-telephones (step 160 of figure 2; read as storing a headroom value) capable of receiving data at higher rates before mobile-telephones capable of receiving data at lower data rates. The data is then transmitted (step 170 of figure 2))

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Gopalakrishnan et al into the teachings of Corazza to integrate voice and data services onto a same frequency channel using available transmit power information to determine data rates.

Consider **claim 22**, Corazza discloses a base station for use in a wireless communication network comprising: transceiver circuits to communicate with a plurality of mobile stations via wireless signaling (abstract; figure 5; col. 4, lines 43-50); one or more processing circuits to control communications with the plurality of mobile stations (figure 5; col. 13, lines 40-52); said one or more processing circuits including a headroom tracking circuit configured to track transmit power headroom for a mobile station by: periodically receiving a full report from a



mobile station that indicates a transmit power headroom of the mobile station (abstract; col. 3, lines 30-41; col. 4, lines 12-16; Transmit power headroom is exchanged between the network and the subscribers); and tracking changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station (abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18; Each subscriber station selects a data rate based on the amount of data queued for transmission and adjusts this rate based on the available power headroom).

Corazza fails to specifically disclose updating a headroom value maintained at the base station for the mobile station responsive to receiving each full report.

In related art, Gopalakrishnan et al disclose updating a headroom value (abstract; read as available transmit power) maintained at the base station for the mobile station responsive to receiving each full report. (abstract; figure 2; col. 5, 10-42; col. 6, lines 54-67; The data rate is transmitted to the base station (step 150 of figure 1) wherein the base station schedules time-slotted data transmissions to mobile-telephones (step 160 of figure 2; read as storing a headroom value) capable of receiving data at higher rates before mobile-telephones capable of receiving data at lower data rates. The data is then transmitted (step 170 of figure 2))

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Gopalakrishnan et al into the teachings of Corazza to integrate voice and data services onto a same frequency channel using available transmit power information to determine data rates.

Consider **claim 2**, and **as applied to claim 1 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein receiving a power headroom report from a mobile station comprises receiving periodic power headroom reports from the mobile station (Gopalakrishnan et al: col. 5, lines 11-27).

Consider **claim 3**, and **as applied to claim 2 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein storing a headroom value for the mobile station based on the power headroom report received from the mobile station comprises setting the stored headroom value to a received headroom value in each periodic power headroom report. (Gopalakrishnan et al: abstract; figure 2; col. 5, 10-42; col. 6, lines 54-67)

Consider **claim 4**, and **as applied to claim 1 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein updating the headroom value to track changes in a transmit power of the mobile station based on reverse link power control information associated with the mobile station comprises incrementing and decrementing the headroom value based on reverse link power control commands being transmitted to the mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 5**, and **as applied to claim 4 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein decrementing the headroom value responsive to transmitting an up power command to the mobile station; and incrementing the

headroom value responsive to transmitting a down power command. (Corazza: col. 8, line 42 to col. 10, line 18)

Consider **claim 6**, and **as applied to claim 1 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein receiving power adjustment feedback from the mobile station indicative of its ongoing reverse link transmit power adjustments, and updating the headroom value based on the power adjustment feedback. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 7**, and **as applied to claim 6 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein receiving power control decisions from the mobile station that indicate whether the mobile station increased or decreased its transmit power in a given power control interval. (Corazza: col. 8, line 42 to col. 10, line 18)

Consider **claim 8**, and **as applied to claim 1 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein determining whether to grant an increased reverse link data rate to the mobile station based on the headroom value. (Corazza: col. 8, line 42 to col. 10, line 18)

Consider **claim 9**, and **as applied to claim 1 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein determining whether to select the

mobile station for a reverse link rate adjustment based on the headroom value. (Corazza: col. 8, line 42 to col. 10, line 18)

Consider **claim 10**, and as applied to **claim 1** above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the mobile station comprises one in a plurality of mobile stations being supported by the base station, and further comprising receiving power headroom reports from the plurality of mobile stations, storing headroom values for the plurality of mobile stations, and updating the headroom value for each mobile station based on reverse link power control information associated with each mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18; Gopalakrishnan et al : abstract; figure 2; col. 5, 10-42; col. 6, lines 54-67).

Consider **claim 12**, and as applied to **claim 11** above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein periodically receiving one or more bits in a Packet Data Unit (PDU) header. (Gopalakrishnan et al: col. 5, lines 11-27)

Consider **claim 13**, and as applied to **claim 12** above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein receiving a full report from the mobile station every N reverse link transmit frames, where N is an integer number greater than zero. (Corazza: abstract; col. 3, lines 30-41; col. 4, lines 12-16)

Consider **claim 14**, and as applied to claim 11 above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein receiving one or more differential reports from the mobile station during intervals between the full reports. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 15**, and as applied to claim 11 above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein tracking changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station comprises receiving one or more bits at each reverse link power control decision point indicating whether the mobile station incrementally increased or decreased its reverse link transmit power at that decision point. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 16**, and as applied to claim 15 above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein incrementally adjusting the headroom value up or down according to the differential reports being received from the mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 17**, and as applied to claim 11 above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein determining whether to select the

mobile station for a reverse link rate increase based on whether the headroom value maintained at the base station for the mobile station indicates that the mobile station has sufficient transmit power headroom to support a contemplated higher rate. (Corazza: col. 8, line 42 to col. 10, line 18)

Consider **claim 18**, and as **applied to claim 11 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein tracking changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station comprising incrementally adjusting the headroom value for the mobile station based on reverse link power control commands being transmitted to the mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 19**, and as **applied to claim 11 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein tracking changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station comprises receiving one or more differential reports from the mobile station between the full reports, wherein the differential reports indicate incremental adjustments in transmit power being made by the mobile station responsive to reverse link power control commands received by the mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 20**, and **as applied to claim 19 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the mobile station comprises one in a plurality of mobile stations, and further comprising maintaining headroom values for the plurality of mobile stations responsive to receiving full and differential reports from each mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18; Gopalakrishnan et al: abstract; figure 2; col. 5, 10-42; col. 6, lines 54-67)

Consider **claim 21**, and **as applied to claim 20 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein using the headroom values maintained for the plurality of mobile stations to determine whether particular ones of the mobile stations are candidates for reverse link rate increases. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 23**, and **as applied to claim 22 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit is configured to periodically receive one or more bits in a Packet Data Unit (PDU) header as the full report. (Gopalakrishnan et al: col. 5, lines 11-27)

Consider **claim 24**, and **as applied to claim 23 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit is configured to receive a full report from the mobile station every N reverse link transmit frames,

where N is an integer number greater than zero. (Corazza: abstract; col. 3, lines 30-41; col. 4, lines 12-16)

Consider **claim 25**, and as applied to claim 22 above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit is configured to track changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station by receiving one or more differential reports from the mobile station during intervals between the full reports. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 26**, and as applied to claim 22 above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit is configured to track changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station by receiving one or more bits at each reverse link power control decision point indicating whether the mobile station incrementally increased or decreased its reverse link transmit power at that decision point. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 27**, and as applied to claim 26 above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit is



configured to track changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station further by incrementally adjusting the headroom value up or down according to the differential reports being received from the mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 28**, and as applied to **claim 22** above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the base station is configured to determine whether to select the mobile station for a reverse link rate increase based on whether the headroom value maintained for the mobile station indicates that the mobile station has sufficient transmit power headroom to support a contemplated higher rate. (Corazza: col. 8, line 42 to col. 10, line 18)

Consider **claim 29**, and as applied to **claim 22** above, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit tracks changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station by incrementally adjusting the headroom value for the mobile station based on reverse link power control commands transmitted to the mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 30**, and as **applied to claim 22 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit tracks changes in transmit power headroom between each full report using reverse link power control information associated with the mobile station by receiving one or more differential reports from the mobile station between the full reports, wherein the differential reports indicate incremental adjustments in transmit power being made by the mobile station responsive to reverse link power control commands received by the mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 31**, and as **applied to claim 30 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the headroom tracking circuit is configured to maintain headroom values for the plurality of mobile stations responsive to receiving full and differential reports from each mobile station. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

Consider **claim 32**, and as **applied to claim 31 above**, Corazza, as modified by Gopalakrishnan et al, discloses the claimed invention wherein the base station is configured to use the headroom values maintained for the plurality of mobile stations to determine whether particular ones of the mobile stations are candidates for reverse link rate increases. (Corazza: abstract; figures 1A-1F; col. 3, lines 30-41; col. 4, lines 12-16; col. 6, lines 30-51; col. 8, line 42 to col. 10, line 18)

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipour whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.


If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lana Le can be reached on (571) 272-7891. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

  
Bobbak Safaipour  
B.S./bs

January 6, 2008

  
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